

CLAIMS

1. A system for implementing a best fare for a patron utilizing a smart card for access to mass transit devices, the system comprising:

a mass transit central computer;

a best fare data base connected to the mass transit central computer, the best fair data base for storing a plurality of price point tables for the mass transit devices;

a value load list processor for downloading at least one of the plurality of price point tables to the mass transit devices;

the mass transit devices comprising:

a smart card reader for reading from and writing to a smart card, the smart card for storing fare transaction data and a monetary value of a purchased fare pass;

a best fare processor in communication with the mass transit central computer, the best fare processor for analyzing transaction data stored on the smart card to a plurality of price points of a price point table of the plurality of price point tables, the best fare processor having means for determining a start date and an end date for the purchased fare pass when the fare transaction data and monetary value meet a price point of the plurality of price points of the price point table.

2. The system of claim 1, wherein the mass transit devices comprise at least one of rail gates, bus fare boxes, and parking lot structures.

3. The system of claim 2, wherein the plurality of price point tables comprises

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2 one of at least one bus price point table, at least one rail gate price point
table, and at least one parking lot equipment price point table.

4. The system of claim 2, wherein a shared price point table of the plurality of
2 price point tables is shared by at least two of the mass transit devices.

5. The system of claim 1, wherein each price point of the plurality of price
2 points defines a number of days associated with the monetary value, and the
start date is determined based upon a first transaction of the transaction data,
4 and the end date is the start date plus the number of days associated with the
monetary value.

6. The system of claim 5, wherein the number of days is a multiple of seven
2 days.

7. The system of claim 1, wherein the smart card stores fare transaction data
2 for up to twenty-eight (28) days.

8. The system of claim 1, further comprising:
2 a transaction data summary database connected to the central
computer for storing the fare transaction data of the smart card
4 for each patron;
a transaction data analyzer connected to the best fare data base and
6 the transaction data summary database, the transaction data
analyzer for determining whether the monetary value of the
8 purchased fare pass meets requirements for longer-period price
points of the plurality of price points.

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9. The system of claim 8, further comprising an adjustor for complex fares,
the adjustor for determining credits due to the patron based upon results of
the transaction data analyzer and for communicating the credits to the central
computer for download to the smart card of the patron.

10. A method for implementing a best fare for a patron utilizing a smart card
for access to mass transit devices, the method comprising the steps of:
storing a plurality of fare transactions and a monetary value of a
purchased fare pass on the smart card;
downloading at least one price point tables to the mass transit devices;
reading the fare transactions and the monetary value from the smart
card;
comparing the fare transactions and the monetary value to a plurality
of price points of the at least one price point table;
determining a start date and an end date for the purchased fare pass
when the fare transactions and monetary value meet a price
point of the plurality of price points.

11. The method of claim 10, further comprising the steps of:
storing the fare transaction data of the smart card for each patron on a
transaction database of a central computer;
determining whether the monetary value of the purchased fare pass
meets requirements for longer-period price points of the plurality
of price points.

12. The method of claim 10, wherein mass transit devices comprise at least
one of rail gates, bus fare boxes, and parking lot structures.

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13. The method of claim 12, wherein the at least one price point table
2 comprises one of at least one bus price point table, at least one rail gate price
point table, and at least one parking lot equipment price point table.

14. The method of claim 12, wherein a shared price point table of the at least
2 one of price point table is shared by at least two of the mass transit devices.

15. The method of claim 10, wherein each price point of the plurality of price
2 points defines a number of days associated with the monetary value, and the
start date is determined based upon a first transaction of the fare
4 transactions, and the end date is the start date plus the number of days
associated with the monetary value.

16. The method of claim 15, wherein the number of days is a multiple of
2 seven days.

17. The method of claim 10, wherein the smart card stores fare transactions
2 for up to twenty-eight (28) days.

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